We claim:

1.    A dynamic continuous and/or semi-continuous or static product measurement, characterizing and identifying system for food stuffs and food product portions and other objects comprising a conveyor means for transport of product or object to be measured to one or more detection regions to detect information comprising height, length, width, dimensional, spatial or topological characteristics, coloring characteristics, and/or moisture content and/or weight and temperature while conveyed products are in motion or static or a combination thereof on said conveying means.

2.    The system of Claim 1, when employed to measure rigid bulk food.

3.    The system of Claim 1, wherein there are one or more discontinuities in the conveyor means.

4.    The system of Claim 1, wherein the conveyor means extends through one or more detection regions in one or more planes perpendicular or angled thereto, and further comprising computer means inclusive of data descriptive of the surface of the conveyor means where it extends through one or more detection regions.

5.    The system of Claim 4 wherein the conveyor means is of a surface shape selected from the group consisting of substantially flat, concave in portions and convex in portions.

6.     The system of Claim 5 wherein the surface characteristics of the conveyor means form a reference database stored in a computer means to be compared to a transported sample product or product to be measured in one or more detection means.

7.     The system of Claim 1 further comprising reject product conveyor means and accept product conveyor means.

8.     The system of Claim 1, further comprising one or more 2-D or 3-D dimensional and/or spatial characteristic measuring means effective to determine the length, width and height of an object and/or spatial or topological characteristics of an object.

9.     The 2-D or 3-D measuring means of Claim 8, which is an optical scanning measuring device.

10.    The system of Claim 1 further comprising a sample weight determining means.

11.    The system of Claim 1, further comprising a contact or non-contact heat or temperature sample detection means.

12.    The system of any of Claims 8 and 11 wherein said dimensional/spatial measuring means and heat detection means is locatable in ring means surrounding said

conveying means and rotatable to any desired angle to said conveying means while detecting product dimensions/spatial characteristics and temperature.

13.     Apparatus for a dynamic continuous and/or semi-continuous or static product measurement, characterizing and identifying system for food stuffs and food product portions and other objects comprising a conveyor means for transport of product or object to be measured to one or more detection regions to detect information comprising height, length, width, dimensional, spatial or topological characteristics, coloring characteristics, and/or moisture content and/or weight and temperature while conveyed products are in motion or static or a combination thereof on said conveying means.

14.     The apparatus of Claim 13 further comprising a use to measure rigid bulk food.

15.     The apparatus of Claim 13 where there are one or more discontinuities in the conveyor means.

16.     The apparatus of Claim 13 wherein the conveyor means extends through one or more detection regions in one or more planes perpendicular or angled thereto, and further comprising computer means inclusive of data descriptive of the surface of the conveyor means where it extends through one or more detection regions.

17.   The apparatus of Claim 16 wherein the conveyor means is of a surface shape selected from the group consisting of substantially flat, concave in portions and convex in portions.

18.   The apparatus of Claim 16 wherein the surface characteristics of the conveyor means form a reference database stored in a computer means to be compared to a transported sample product to be measured in one or more detection means.

19.   The apparatus of Claim 13 further comprising reject product conveyor means and accept product conveyor means.

20.   The apparatus of Claim 13 further comprising one or more 2-D or 3-D dimensional and/or spatial characteristics measuring means effective to determine the length, width and height of an object and/or spatial or topological characteristics of an object.

21.   The 2-D or 3-D measuring means of Claim 20 which is an optical scanning/measuring device.

22.   The apparatus of Claim 13 further comprising a sample weight determining means.

23.    The apparatus of Claim 13 further comprising a contact or non-contact heat sample detection means.


24.    The apparatus of Claims 13 and 23 wherein said dimensional/spatial measuring means and heat detection means is locatable in a ring means surrounding said conveying means and rotatable to any desired angle to said conveying means while detecting product dimensions/spatial characteristics and temperature.


25.    A method of conducting business comprising a dynamic continuous and/or semi-continuous product measurement, characterizing and identifying system and/or apparatus for food stuffs and food product portions and other objects comprising a conveyor means for transport of product or object to be measured to one ore more detection regions to detect information comprising height ,length, width, dimensional, spatial or topological characteristics, coloring characteristics, and/or moisture content and/or weight and temperature while conveyed products are in motion, static or a combination thereof on said conveying means.

26. (New) A dynamic continuous, semi-continuous or static quality control system for commercial food processing comprising a conveyor means for transport of product or object to be measured to more than one or a plurality of detection regions to detect information selected from height, length, width, dimensional spatial or topological characteristics, density, moisture content, weight and temperature while conveyed products are in motion or static or a combination thereof on said conveying means.

27.(New) The system of any of claims 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12 wherein said system is a quality control system for commercial food processing.

28.(New) The apparatus of any of claims 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, and 24 wherein said system is a quality control system for commercial food processing.